

REPORT
OF
C. L. TAYLOR
GAS INSPECTOR
AND
EX-OFFICIO WATER INSPECTOR
OF THE
CITY AND COUNTY OF SAN FRANCISCO
FOR THE
FISCAL YEAR ENDING JUNE 30, 1898



SAN FRANCISCO
THE HINTON PRINTING CO., 321 SACRAMENTO ST.
1898.

GAS INSPECTOR'S REPORT.

CITY HALL,
OFFICE OF THE GAS AND WATER INSPECTOR. }
SAN FRANCISCO, July 1, 1898. }

*To the Honorable the Board of Supervisors
Of the City and County of San Francisco—*

GENTLEMEN: Pursuant to Resolution No. 1,043 (Fourth Series), passed by your Honorable Board on April 25, 1898, I herein respectfully submit my report of the working of the department of Gas and Water Inspector, for the fiscal year ending June 30, 1898.

Very respectfully,

C. L. TAYLOR,
Gas and ex-officio Water Inspector.

EXPENSES.

Salary of Inspector.....	\$1,800 00
Material including stationery	17 75
Total.....	\$1,817 75

The gas used in the City and County of San Francisco is furnished by the San Francisco Gas and Electric Company and the Pacific Gas Improvement Company, two private corporations. The rate charged for gas sold to private consumers is \$1.75 per thousand cubic feet. Gas has been furnished the City by contract at the rate of \$1.60 per thousand cubic feet. There is a new contract which took effect ~~August~~ ^{July} 1st, in which the price is \$1.50. The street lamps are supplied with gas by the San Francisco Gas and Electric Company, and the City pays twelve cents per night for each lamp for every night lighted.

The lamps are lighted one-half hour after sunset, and are extinguished one hour before sunrise. They are lighted every night during the year, excepting certain nights of each month (the night of full moon), and the nights preceding and following full moon, as may be designated by resolution of the Board of Supervisors.

The number of lamps in use June 30, 1898, 5,377.

The gas furnished by the San Francisco Gas and Electric Company is manufactured at the Potrero Station, and at the new works called the North Beach Station, situated on Bay and Buchanan streets. The principal business office is located at No. 415 Post street.

GAS INSPECTOR'S REPORT.

The company has holder plants at Howard and Fifth streets and at King and Second streets. The kind of gas made is a mixture of coal gas and water gas.

Estimated capacity of works 6,700,000 cubic feet per twenty-four hours; storage, about 4,600,000 cubic feet.

The Pacific Gas Improvement Company's works are located on the grounds bounded by Fillmore, Pierce, Francisco and Bay streets. It has also a holder at Townsend street, between Second and Third streets, where are also located the work and repair shops of the company.

The principal business office is at the corner of Annie and Stevenson streets. The kind of gas made is a mixture of coal gas and water gas.

Estimated capacity of works, 2,500,000 cubic feet per twenty-four hours; storage capacity about 1,600,000 cubic feet.

Frequent tests have been made of the gas of both companies for the presence of sulphureted hydrogen, and no trace of it has been found.

The average specific gravity of the gas made by the San Francisco Gas and Electric Company was 653, and the average specific gravity made by the Pacific Gas Improvement Company was 650.

The electric light, used by the City, is furnished by the Edison Light and Power Company, a private corporation, office 415 Post street. The electric light is used by the City principally for street illumination, and comprises lamps placed at various locations consisting of 638 single lamps of 2,000 candle power each, at 55 cents per night each, and incandescent lights in the offices of the City Hall, Fire Alarm Station and Branch Jails, City Morgue, two food stations, two engine houses, North End Police Station and Folsom Street Police Station.

SAN FRANCISCO GAS AND ELECTRIC LIGHT COMPANY.

The San Francisco Gas and Electric Company furnished the following public buildings and Fire Department buildings with gas:

PUBLIC BUILDINGS (GAS).

BUILDING.	BUILDING.
Police Patrol Stable.	Exempt Engine.
Fire Alarm Station.	City and County Hospital.
Coroner's Office.	Branch Receiving Hospital (Mission St. Wharf).

POLICE STATIONS (GAS).

BUILDING.	LOCATION.
Police Station.	O'Farrell between Devisadero and Broderick.
Police Station.....	203 Seventeenth street.
Police Station.	827 Folsom street.
Police Station.	32 Sacramento street.
Police Station.....	536 California street.
Police Station.....	Napa street between Kentucky and Illinois.
Police Station.	Kentucky street.
Police Station.....	1712 Washington street.
Police Station.....	1201 Railroad avenue.

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FIRE DEPARTMENT BUILDINGS (GAS).

BUILDINGS.	LOCATION.
Engine No. 7.....	Sixteenth street between Valencia and Guerrero.
Engine No. 9.....	Main and Folsom streets.
Engine No. 11.....	South San Francisco—Annie and Railroad avenue.
Engine No. 13.....	Valencia, near Twenty-sixth street.

FIRE DEPARTMENT BUILDINGS (GAS)—CONTINUED.

BUILDINGS.	LOCATION.
Engine No. 16.....	South San Francisco—Tennessee and Shasta streets.
Engine No. 17.....	Mint avenue, near Fifth street.
Engine No. 18	Duncan street, near Church.
Engine No. 19.....	Walter street, near Octavia.
Engine No. 21.....	Oak street, near Broderick.
Engine No. 24.....	Douglass street, near Twenty-second.
Engine No. 25	Folsom street, near Twenty-second.
Engine No. 27.....	Herman street, near Steiner.
Engine No. 28.....	Francisco and Stockton streets.
Engine No. 29.....	Eleventh and Bryant streets.
Engine No. 31.....	Pacific and Jones streets.
Engine No. 32.....	Seventeenth and Folsom streets.
Engine No. 34.....	Ellis street, near Octavia.
Chemical Engine No. 5.....	1802 Stockton street.
Truck Company No. 3.....	Market street, near Tenth.
Fire Department Stables	Ridley and Steiner streets.
Fire Department Stables	Bryant and Tenth streets.
Fire Department Storehouse.....	Francisco and Stockton streets.

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AMOUNT PAID SAN FRANCISCO GAS AND ELECTRIC COMPANY FOR GAS FOR YEAR
ENDING JUNE 30, 1898.

PUBLIC BUILDINGS.

(Including Police Stations, not including Fire Department Buildings.)

MONTH.	CUBIC FEET.	AMOUNT.
1897--July	387,800	\$620 48
August.....	398,800	635 08
September.....	456,600	730 56
October	466,800	746 88
November.....	538,600	861 76
December.....	647,400	1,035 84
1898--January.....	608,200	973 12
February.....	579,000	926 40
March.....	654,000	1,046 40
April.....	499,200	798 72
May.....	451,400	722 24
June.....	403,000	604 50
Totals.....	6,090,800	\$9,704 98

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AMOUNT PAID SAN FRANCISCO GAS AND ELECTRIC COMPANY FOR GAS FOR
YEAR ENDING JUNE 30, 1898.

FIRE DEPARTMENT BUILDINGS.

MONTH.	CUBIC FEET.	AMOUNT
1897—July.....	74,800	\$119 68
August.....	73,800	118 08
September.....	84,400	135 04
October.....	90,600	144 96
November.....	103,800	166 08
December.....	116,400	186 24
1898—January.....	109,800	175 68
February.....	98,000	156 80
March.....	99,400	159 04
April.....	80,200	128 32
May.....	71,800	114 88
June.....	60,400	90 60
Totals	1,063,400	\$1,695 40

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AMOUNT PAID SAN FRANCISCO GAS AND ELECTRIC COMPANY FOR GAS FURNISHED
TO CITY LAMPS FOR YEAR ENDING JUNE 30, 1898.

MONTH.	NUMBER OF PUBLIC GAS LAMPS LIGHTED EACH MONTH.	NUMBER OF NIGHTS LIGHTED EACH MONTH.	AMOUNT CHARGED EACH MONTH.	LABOR AND PIPE CHARGED.
1897—July.....	5,377	27	\$17,350 80	
August.	5,377	27	17,272 28	\$97 32
September.....	5,377	26	16,716 72	
October	5,377	27	17,362 80	
November.....	5,377	27	17,366 64	140 89
December.....	5,377	28	18,002 88	
1898—January.....	5,377	28	16,148 60	
February	5,377	25	16,083 96	
March.....	5,377	20	12,858 24	
April.	5,377	17	12,228 12	
May.....	5,377	21	15,928 80	
June.....	5,377	25	16,089 00	120 60
Total			\$193,508 84	\$358 81

GAS INSPECTOR'S REPORT.

AMOUNT PAID SAN FRANCISCO GAS AND ELECTRIC COMPANY FOR ELECTRIC
LIGHTS FURNISHED TO CITY FOR YEAR ENDING JUNE 30, 1898.

MONTH.	PUBLIC BUILDINGS.	STREET LIGHTS.
1897—July	\$1,251 75	\$9,547 45
August	1,249 61	9,532 00
September	1,206 95	9,194 90
October	1,485 32	9,547 45
November	1,480 53	9,525 45
December	1,817 61	6,997 12
1898—January	1,412 81	8,851 40
February	1,319 75	8,737 35
March	1,181 17	7,072 45
April	1,148 15	6,721 55
May	1,205 50	8,802 20
June	884 47	8,797 25
Totals	\$15,643 62	\$103,377 17

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AMOUNT PAID PACIFIC GAS IMPROVEMENT COMPANY FOR GAS FOR YEAR
ENDING JUNE 30, 1898.

PUBLIC BUILDINGS (CITY HALL AND BROADWAY COUNTY JAIL).

MONTH.	CUBIC FEET.	AMOUNT.
1897—July, at \$1 60 rate	750,600	\$1,200 96
August	687,900	1,100 64
September	663,300	1,061 28
October	695,100	1,112 16
November	740,500	1,184 80
December	819,800	1,311 68
1898—January	791,900	1,267 04
February	749,700	1,199 52
March	699,600	1,119 36
April	684,400	1,095 04
May	719,400	1,151 04
June, at \$1 50 rate	696,800	1,045 20
Totals	8,699,000	\$13,848 72

GAS INSPECTOR'S REPORT.

AMOUNT PAID PACIFIC GAS IMPROVEMENT COMPANY FOR GAS FOR YEAR ENDING
JUNE 30, 1898.

FIRE DEPARTMENT BUILDINGS.

MONTH.	CUBIC FEET.	AMOUNT.
1897—July (at \$1 60 rate).....	107,400	\$171 84
August.....	91,600	146 56
September.....	101,900	163 04
October.....	121,400	194 24
November.....	141,100	225 76
December.....	156,400	250 24
1898—January.....	143,600	229 76
February.....	120,800	193 38
March.....	125,600	200 96
April.....	108,200	173 12
May.....	103,600	165 76
June, at \$1 50 rate.....	79,200	118 80
Totals.....	1,400,800	\$2,233 46

PACIFIC GAS IMPROVEMENT COMPANY.

The Pacific Gas Improvement Company furnished the following public buildings and Fire Department buildings with gas:

FIRE DEPARTMENT BUILDINGS.

BUILDINGS.	LOCATION.
Engine No. 1.....	419 Pacific street.
Engine No. 2.....	Bush and Kearny streets.
Engine No. 3.....	California street, near Hyde.
Engine No. 4.....	Second street, near Howard.
Engine No. 5.....	Stockton street, near Pacific.
Engine No. 6.....	Sixth street, near Folsom.
Engine No. 8.....	Pacific street, near Polk.
Engine No. 10.....	Bryant street, near Fourth.
Engine No. 12.....	Drumm and Commercial streets.
Engine No. 14.....	1017 McAllister street.
Engine No. 15.....	California street, near Laguna.
Engine No. 20.....	2119 Filbert street.
Engine No. 22.....	Post street, near Fillmore.
Engine No. 23.....	3022 Washington street.
Engine No. 26.....	West side Second avenue, between Point Lobos avenue and Clement street.
Engine No. 30.....	South side Waller street, near Stanyan.
Chemical Engine Company No. 3.....	112 Jackson street.
Chemical Engine Company No. 4.....	634 Eddy street.
Truck Company No. 1.....	O'Farrell street, near Grant avenue.
Truck Company No. 2.....	Broadway street, near Stockton.
Corporation Yard.....	50 Sacramento street.
Water Tower.....	New Montgomery, near Mission street.

GAS INSPECTOR'S REPORT.

SPRING VALLEY WATER.

The water used by the City and County of San Francisco is furnished principally by the Spring Valley Water Works, and the rate, or amount allowed to be collected for such service must be fixed by the Board of Supervisors some time during the month of February of each and every year. All of the public buildings of the City, such as jails, hospitals, City Hall, engine-houses, police stations, school-houses, etc., are rated at so much per superficial foot for general purposes; then a specified rate for water-closets, urinals and fixtures, and so much per head for inmates of public institutions. Parks and public squares are charged under the rate of irrigation one-half cent per square yard. Public sprinkling is charged for at the regular meter rate of 30 cents per square hundred cubic feet. The public fire hydrants, for purposes of fire and flushing sewers, are charged for at the rate of \$5 00 per month per hydrant. The rate fixed by the Supervisors applies also to all other consumers and water-takers within the city.

AMOUNT PAID SPRING VALLEY WATER WORKS FOR WATER FOR MUNICIPAL
PURPOSES DURING YEAR 1897-98.

MONTH.	PUBLIC BUILDINGS.	PARKS.	HYDRANTS.	TOTALS.
1897—July	\$2,061 33	\$721 56	\$16,720 00	\$19,502 89
August	2,087 43	721 56	16,845 00	19,653 99
September	2,054 93	820 89	16,975 00	19,850 82
October	2,053 18	820 89	16,975 00	19,849 07
November	2,057 13	820 89	17,155 00	19,933 02
December	2,050 18	820 89	17,125 04	19,996 07
1898—January	2,028 83	320 89	17,225 00	20,074 72
February	2,021 83	820 89	17,245 00	20,087 72
March	2,014 98	820 89	17,260 00	20,095 87
April	2,036 73	820 89	17,490 00	20,347 62
May	2,031 93	820 89	17,475 00	20,327 82
June	2,048 88	820 89	17,640 00	20,509 77
Totals	\$24,547 36	\$9,652 02	\$206,030 00	\$240,229 38

On June 30, 1898, there was in service 3,528 hydrants at \$5 00 per month.

Water is also furnished to the following engine company and fire hydrants by the Visitacion Water Company:

Engine House—Fifteenth and Railroad avenues.

4 Fire Hydrants—Fifteenth avenue, between Railroad avenue and N street.

Fifteenth avenue, between Railroad avenue and Q street.

Twenty-fourth avenue and K street.

Engine House—\$5 00 per month..... \$60 00

4 Hydrants, \$5 00 per month per hydrant..... 240 00

Total..... \$200 00

RECAPITULATION.

TOTAL AMOUNTS PAID BY THE CITY AND COUNTY FOR GAS, WATER, ELECTRIC LIGHTS, ETC., FOR FISCAL YEAR ENDING JUNE 30, 1898.

TO WHOM AND FOR WHAT PAID.	AMOUNT.	TOTAL.
FOR GAS.		
To San Francisco Gas and Electric Company—		
Lamps.....	\$193,508 84	
Public buildings.....	9,704 98	
Fire Department buildings.....	1,695 40	
Pipe and labor.....	358 81	
		\$205,268 03
Pacific Gas Improvement Company—		
Public buildings.....	\$13,848 72	
Fire Department buildings.....	2,233 46	
		16,082 18
FOR ELECTRIC LIGHTS.		
Edison Light and Power Company—		
Public Squares and streets.....	\$103,377 17	
Public buildings.....	15,642 62	
		119,020 79
FOR WATER.		
Spring Valley Water Works—		
For public buildings.....	\$24,547 36	
Parks.....	9,652 02	
Hydrants.....	206,030 00	
		240,229 38
Visitacion Water Company—		
Engine houses.....	\$60 00	
Fire hydrants.....	240 00	
		300 00
Total meters tested.....		31
Meters correct.....		9
Meters slow.....		21
Meters fast.....		1

GAS INSPECTOR'S REPORT.

TABLE

Showing average candle power of the gas made by the San Francisco Gas and Electric Company for every week during the year ending June 30, 1898.

CANDLE POWER.

MONTHS.	WEEKLY AVERAGE.				
	3d.	10th.	17th.	24th.	31st.
1897—July	21.20	20.00	19.50	19.40	19.25
August	19.00	20.50	19.75	19.60	
September	19.50	20.25	19.25	19.00	
October	19.00	19.25	19.40	17.94	19.25
November	19.00	19.00	19.50	19.00	
December	18.75	19.50	19.50	19.25	19.00
1898—January	19.26	19.40	19.00	19.00	
February.....	18.70	19.70	19.25	19.40	
March.....	19.25	19.50	19.00	18.70	
April	18.80	18.90	19.00	19.50	19.00
May	19.20	19.00	18.66	19.00	
June	18.75	18.55	18.75	17.95	

Average candle power for the year, 19.22 Candles.

GAS INSPECTOR'S REPORT.

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TABLE

Showing average candle power of the gas made by the Pacific Gas Improvement Company for the year ending June 30, 1898.

CANDLE POWER.

MONTHS.	WEEKLY AVERAGE.				
	3d.	10th.	17th.	24th.	31st.
1897—July	18.25	18.75	19.00	18.60	18.50
August	7th. 18.60	14th. 20.00	21st. 18.75	28th. 18.75	
September	4th. 19.00	11th. 18.50	18th. 19.50	25th. 19.50	
October	2d. 18.50	9th. 19.75	15th. 19.00	23d. 17.94	30th. 18.00
November	6th. 18.50	13th. 18.30	20th. 18.75	27th. 19.50	
December	4th. 19.00	11th. 19.50	18th. 18.50	24th. 18.75	31st. 19.25
1898—January	7th. 19.00	14th. 19.50	22d. 19.25	27th. 18.50	
February	5th. 18.50	12th. 18.75	15th. 19.00	25th. 19.15	
March	5th. 19.00	12th. 18.75	19th. 18.80	26th. 19.00	
April	2d. 18.05	9th. 18.25	16th. 18.40	23d. 18.25	30th. 18.00
May	6th. 18.00	14th. 17.75	21st. 17.07	28th. 17.25	
June	4th. 18.00	11th. 17.53	18th. 17.66	25th. 17.30	

Average 18.65

TABLE

Showing average candle power of the Edison Light and Power Company for every week during the year ending June 30, 1898.

CANDLE POWER.

MONTHS.	WEEKLY AVERAGE.				
	3d.	10th.	17th.	24th.	31st.
1897—July.....	21.70	21.00	21.20	21.00	21.20
August.....	7th. 21.40	14th. 21.00	21st. 19.25	28th. 20.50	
September.....	4th. 20.00	11th. 20.30	18th. 20.25	25th. 21.90	
October.....	2d. 21.00	9th. 20.75	16th. 21.00	23d. 20.38	30th. 22.55
November.....	6th. 21.60	13th. 21.00	20th. 19.00	27th. 19.50	
December.....	4th. 19.90	11th. 20.00	18th. 24.00	24th. 23.00	31st. 23.00
1898—January.....	7th. 21.25	14th. 21.50	22d. 22.00	29th. 21.80	
February.....	5th. 21.00	12th. 21.50	19th. 21.25	25th. 21.00	
March.....	5th. 21.50	12th. 20.55	19th. 20.40	26th. 20.90	
April.....	2d. 20.30	9th. 20.00	16th. 20.25	23d. 20.25	30th. 20.50
May.....	6th. 20.30	14th. 20.00	21st. 20.32	28th. 20.10	
June.....	4th. 20.10	11th. 20.70	18th. 20.50	25th. 19.63	

Average candle power for the year, 20.64 Candles.

GAS INSPECTOR'S REPORT.

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LIST OF WATER METERS TESTED DURING THE FISCAL YEAR ENDING JUNE 30,
1898, UNDER THE ORDINANCE PROVIDING THAT A TEST MUST BE MADE BY THE
WATER INSPECTOR TO ASCERTAIN THE CONDITION OF A METER UPON COM-
PLAINT OF A CONSUMER.

CONDITION OF WATER METERS TESTED

DATE OF TEST.	PREMISES.	CONDITION OF METER.
1897—July 23.....	22 Montgomery street.....	Correct.
July 31.....	327 Bush street.....	A trifle slow.
August 10.....	100 and 102 Fifth street.....	Correct.
August 12.....	502 Second street.....	4½ per cent slow.
August 26.....	431 California street.....	25 per cent slow.
September 1.....	22 and 24 Battery street.....	Correct.
September 24.....	Corner of Seventh and Market streets.....	A trifle slow.
October 9.....	Southeast corner of Hyde and Geary streets.....	8½ per cent slow.
October 9.....	504 Market street.....	6 per cent slow
October 9.....	35 Post street.....	Correct.
October 14.....	512 Bush street.....	Correct.
October 14.....	114 to 120 Post street.....	20 per cent slow.
October 14.....	Alley in rear of 118 Post street.....	Correct.
October 15.....	922 Post street.....	4½ per cent slow.
October 28.....	Southwest corner of Franklin and Greenwich.....	4½ per cent fast.
November 11.....	1604 Polk street.....	Correct.
November 20.....	963 Market street.....	8½ per cent slow.
December 7.....	231 Kearny street.....	12½ per cent slow.
December 24.....	332 Eddy street.....	Correct.
1898—January 15.....	138 Broadway street.....	20½ per cent slow.
January 17.....	614 Sutter street.....	8½ per cent slow
January 17.....	420 McAllister street.....	4½ per cent slow.
February 3.....	515 Market street.....	12½ per cent slow.
February 10.....	Southwest corner of California and Dupont streets.....	12½ per cent slow
February 12.....	417 Mason street.....	12½ per cent slow.
April 8.....	425 Montgomery street.....	25 per cent slow.
April 26.....	417 Pine street.....	4½ per cent slow.
May 6.....	404 Post street.....	4½ per cent slow.
May 12.....	Southeast corner of Polk and Sacramento streets.....	8½ per cent slow.
May 25.....	525 Broadway street.....	Correct.
June 16.....	417 Larkin street.....	8½ per cent slow.

The following information from Eastern cities was collated and submitted to the Honorable Board of Supervisors on May 17, 1897:

The city of New York has contracts with no less than six gas companies to supply street lighting. The prices charged by the different companies are as follows:

Contracts to furnish lamps with gas all over the city upon their lines—

Consolidated Gas Company, per lamp per year.....\$17 50

Contracts cover only lamps on their mains—

Equitable Gas Company, per lamp per year..... 12 00

Lamps on their mains—

Standard Gas Company, per lamp per year..... 13 03½

Control certain sections of the city—

Central Gas Company, per lamp per year..... 24 00

Control certain sections of the city—

Northern Gas Company, per lamp per year..... 28 00

Control certain sections of the city—

Yonkers Gas Company, per lamp per year..... 28 00

The contracts specify that the gas furnished shall not be less than twenty candle-power, and the statements of the various companies show the actual candle-power from a fraction above twenty up to twenty-nine candle-power.

The city of New York has a lamp department and owns the lamp, lanterns and burners; in some instances they furnish their own service from the mains to the lamps, and keep all in good condition at the expense of the city; also pay for the lamp-lighting and extinguishing.

The cost of lighting public buildings is the same as that charged the citizens, and is fixed by law, and is \$1 25 per thousand cubic feet

The city of Philadelphia owns her own gas works, and they are considered one of her most valuable assets; they have been valued at \$30,000,000. However, it is admitted in their annual reports that "the quality of their gas is not what it should be, for want of further improvements." The rate charged for gas sold is \$1 00 per thousand cubic feet.

The Commonwealth of Massachusetts has a Board of Gas and Electric Light Commissioners, whose duty appears to be that of general supervision of the different gas and electric companies of the State, as to quality and price of gas, also the amount of stock and bonds issued by the companies. They report 133 companies distributed in the various towns and cities, of which they report 27 engaged in the supplying of gas only; 24 in the supply of both gas and electric lights, and 62 supplying only electric lights. The law requires that the quality shall not be less than sixteen candle-power; the price of street lamp-lighting in the ten cities with the largest number of lamps averages about \$1 00 per thousand cubic feet, the rate being from 72 cents to \$1 74 cents per thousand, and the price received for gas sold in five cities with the largest consumption was from 99 cents to \$1 35 per thousand cubic feet.

The street-lighting system of Boston is similar to that of New York herein referred to. They have a Street Lamp-Lighting Department, with a Superintendent, who has his deputies, clerks and assistants, who attend to the business of street-lighting, repairing, etc., at the expense of the city.

CITY.	QUANTITY AND QUALITY.	AMOUNT.
Cincinnati.....	Price per 1,000 cubic feet, 16 candle-power	\$1 00
Cleveland	Price per 1,000 cubic feet, irrespective of quality	80
Buffalo.....	Price per 1,000 cubic feet, 18 candle-power.	1 00
Milwaukee.....	Price per 1,000 cubic feet, 18 candle-power.....	1 00
	Price per lamp, public buildings	80
	Price per lamp, five-feet burners, per annum	22 00
Indianapolis ..	Price per 1,000 cubic feet, 16 candle-power.....	1 25
	Price per each lamp per annum.....	17 00
St. Paul	Price per 1,000 cubic feet.	1 40
	City street lights, each lamp per annum	23 00
Allegheny.....	Price per 1,000 cubic feet, 16 candle-power	1 00
Albany	Price per 1,000 cubic feet, supposed to be 26 candle-power.....	1 70
Syracuse.	Price per 1,000 cubic feet, supposed to be 22 candle-power...	1 30

I have written to the authorities or friends in thirty of the largest cities in the United States, inquiring as to the quality and illuminating power of gas manufactured and prices charged, and the cost of manufacturing the same, and the only cities heard from are herein reported upon. The information from some of these is from private sources, especially so in the case of New York. I find it a very difficult matter to get reliable information, or in fact any information at all, as to the cost of manufacturing gas in the different cities, for the reason that the companies are not disposed to give the information. Further, so much depends upon the cost of the raw material, which varies very much in different localities, that I do not find it possible to make any accurate comparison of the cost of gas of other cities and San Francisco.

ELECTRIC LIGHTING RATES.*

Through the Mayors of a number of cities, the League of American Municipalities has secured the rates charged by private companies for arc and incandescent lights for commercial purposes. The table below shows the rates for incandescent lights in twenty-five cities scattered throughout the country. The *Review* has added San Francisco to the list:

*From Merchants' Association Review, July, 1898.

INCANDESCENT LAMPS.

CITY.	RATE.		DISCOUNTS.	
	Per Ampere Hour.	Per 1,000 Watts.	For Prompt Payments.	According to Amount of Bills.
Elmira, N. Y.....	\$.0100	.....	.....	.....
Rochester, N. Y.....	.....	\$.1400	.....	Reductions to 10 cts. per 1,000
Utica, N. Y.....	.0075	.....	.....	On large contracts only.
Jersey City, N. J.....	.0070	.....	.....	.....
Indianapolis, Ind.....	.....	.1250	.....	.....
Fort Wayne, Ind.....	.0100	.....	25% in 10 days.....	.....
Wheeling, W. Va.....	.0075	.....	5% in 15 days ..	5% to 35%.
Portland, Me.....	.....	.1500	.....	5% to 40%.
Louisville, Ky.....	.0100	.....	30% in 15 days.....	.....
Harrisburg, Pa.....	.....	.1500	.....	5% to 25%.
Savannah, Ga.....	.0010	.....	.....	20% to 35%.
Augusta, Ga.....	.....	.1700	.....	.....
Atlanta, Ga.....	.0075	.....	.....	10% to 40%.
Denver, Colo. ....	.0100	.....	.....	Reductions to ½ c. per hour.
Salt Lake City.....	.0100	.....	10% in 8 days ..	.....
Los Angeles, Cal.....	.0140	.....	.....	10% to 28%.
Oakland, Cal.....	.....	.1080	.....	.....
St. Paul, Minn. ....	.0120	.....	16⅔% in 10 days .	On large contracts.
Charleston, S. C.....	.....	.1700	.....	10% to 25%.
Nashville, Tenn.....	.....	.1800	.....	10% to 33%.
Dayton, O.....	.....	.1500	.....	5% to 20%.
Des Moines, Ia.....	.....	.1500	.....	.....
New Haven, Conn....	.0075	.....	.....	.....
Springfield, Mass....	.....	.2300	.....	10% to 45%.
Lowell, Mass.....	.....	.1000	.....	.....
San Francisco, Cal. ....	.....	.1000	.....	10% to 30%.

ARC LIGHTS.

Rates for arc lights of 2,000 candle-power are as follows:

- Elmira, N. Y.—Until 10:15 P. M., \$6 25 per month; until 12 P. M., \$8 00 per month; all night \$9 00 per month; special lightings, 40 cents per night; no lights furnished for less than eight nights per month.
- Rochester, N. Y.—Per hour, $3\frac{1}{2}$ cents; minimum rate, \$3 00 per month.
- Utica, N. Y.—Per night, 35 cents.
- Jersey City, N. J.—Until 8:30 P. M., \$9 00 per month; until 10 P. M., \$10 00 per month; until 12 P. M., \$11 00 per month; all night, \$15 00 per month.
- Indianapolis, Ind.—Per 10,000 watts, \$1 25.
- Fort Wayne, Ind.—Until 12 P. M., \$8 35 per month for single light; \$6 50 per month for each additional light.
- Louisville, Ky.—Until 12 P. M., 30 cents per night; all night, 50 cents per night; all day, 40 cents per day; special service, 6 cents per hour.
- Harrisburg, Pa.—Until 12 P. M., \$7 00 per month; all night, \$10 00 per month.
- Savannah, Ga.—Until 12 P. M., \$100 00 per year; all night, \$150 00 per year.
- Augusta, Ga.—Until 12 P. M., \$6 00 per month; all night, \$16 00 per month.
- Atlanta, Ga.—Until 11 P. M., \$9 38 per month; all night, \$11 25 per month; discount, 10 per cent.
- Denver, Colo.—Until 10 P. M., \$10 00 per month; until 12 P. M., \$11 00 per month; all night, \$17 00 per month; discount, 10 per cent for cash.
- Salt Lake City, Utah—Until 10 P. M., \$8 00 per month; until 12 P. M., \$10 00 per month; all night, \$15 00 per month.
- Los Angeles, Cal.—Until 9 P. M., \$1 25 per week; until 12 P. M., \$2 00 per week.
- Oakland, Cal.—Until 10 P. M., \$2 00 per week; until 12 P. M., \$2 75 per week.
- St. Paul, Minn.—Until 7 P. M., 35 cents per night; until 10 P. M., 40 cents per night; until 12 P. M., 60 cents per night; all night, 95 cents per night; all day, 60 cents per day; discount, 5 per cent for cash in ten days.
- Charleston, S. C.—Per 1,000 watts, 17 cents; discount, 10 to 25 per cent, according to amount of monthly bills.
- Nashville, Tenn.—Until 9 P. M., \$9 75 per month; until 12 P. M., \$13 33 per month; all night, \$17 00 per month; discount, 10 per cent for prompt payment.
- Dayton, O.—Until 9:30 P. M., 25 cents per night; all night, \$15 00 per month.
- Des Moines, Ia.—Until 12 P. M., \$120 00 per year.
- Springfield, Mass.—All night, 40 cents per night.
- Erie, Pa.—Mayor Saltsman writes: "Competition makes electric lighting here the cheapest of any city in the United States. A person can have his house fitted up with sixteen candle-power incandescent lights, and the charge will be from 10 to 30 cents per light per month. Arc lights of 1,200 candle-power are \$3 50 per month."
- San Francisco rates—Until 12 P. M., \$1 50 to \$3 00 per week; all night, \$2 00 to \$3 50 per week

W. G. Stephens







